

# What is climate change?

Climate change is any long-term significant change in the climate over time.

Over the past 200 years, the amount of carbon dioxide in the atmosphere has increased by 35 percent and this has changed the earth's weather conditions. It is causing increased global temperatures, rising sea levels, more intense storms and melting ice sheets and glaciers. From 1906–2005, the global surface temperature has increased 0.74°C (IPCC, 2007). Continued warming will depend on the way humans respond to this evidence.

The main cause of climate change is the burning of fossil fuels (oil, coal and natural gas) and the cutting down of trees (deforestation), which convert carbon dioxide into oxygen. Human beings play a significant role in both the burning of fossil fuels and deforestation.

## What are the main causes of climate change?



**Increased burning of fossil fuels**  
(coal, oil and natural gas)



**Increased deforestation**

## What is the impact of climate change?

**Increase in temperatures**

**Rise in sea levels**

**Increased storms and natural disasters**

**Melting ice sheets and glaciers**

## What are the consequences for poor communities?

**Health and education suffer**

**Loss of habitats and biodiversity**

**Food and agricultural losses**

**Water shortages**

**Increased conflict and migration**

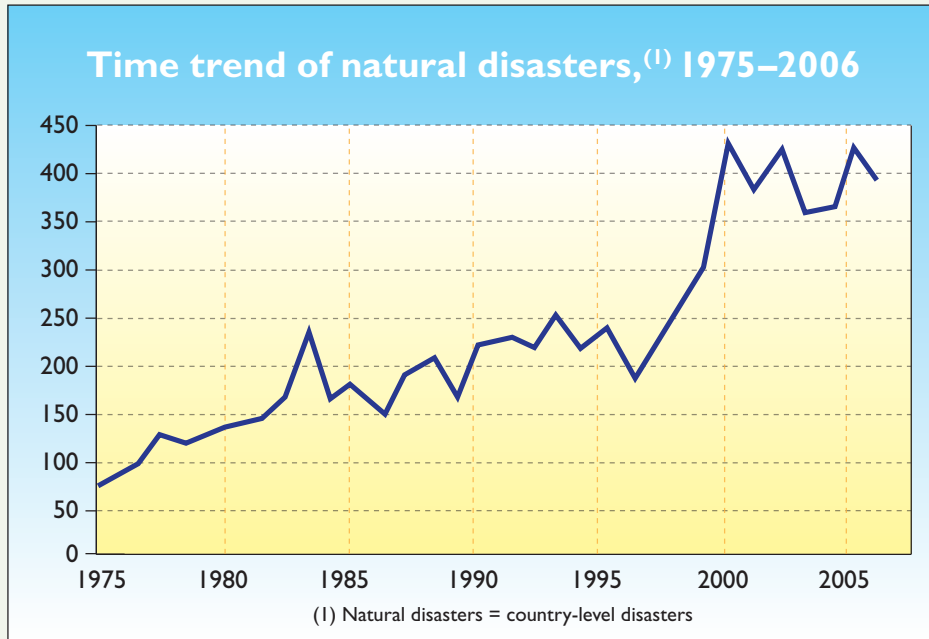


## What is the difference between climate and weather?

**Weather** is the day-to-day condition of the atmosphere at a particular place. It can change from day to day and even hour to hour.

**Climate** is the weather experienced by a place over many years.

A drop of 5°C in the **weather** may mean you need to take a coat with you if you go outside. However, a drop of 5°C in the **average climate** may mean 100 metres of ice covering your house!



Source: <http://www.unisdr.org/disaster-statistics/pdf/isdr-disaster-statistics-occurrence.pdf>

### DID YOU KNOW?

Nine planet Earths would be required to absorb all of the world's carbon if every poor person had the same energy-rich lifestyle as an Australian.

## For You To Do!

1. The two main causes of climate change are:

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

2. How does climate change impact the environment?

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

(iii) \_\_\_\_\_ (iv) \_\_\_\_\_

3. The consequences for poor communities include:

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

(iii) \_\_\_\_\_ (iv) \_\_\_\_\_

(v) \_\_\_\_\_